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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,215	04/13/2005	Petrus Cornelis Paulus Bouten	NL02 1006 US	7856

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EXAMINER	
LAWSON, MATTHEW P	
ART UNIT	PAPER NUMBER
2809	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/531,215	BOUTEN ET AL.	
	Examiner	Art Unit	
	Matthew P. Lawson	2809	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *13 April 2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *Foreign Ref.*.

DETAILED ACTION

Status of the Application

1. **Claims 1-25** are pending in this application.

2. If applicant is aware of any prior art or any co- pending application not already on record, the applicant is reminded of his/her duty under 37 C.F.R. §1.56 to disclose the same.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information disclosure statement (IDS) was filed on 13 April 2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

5. **Claim 17** recites the limitation "said second layer" (line 2). There is insufficient antecedent basis for this limitation in the claim.

6. **Claim 19** recites the limitation "Δ/d" in the equation (line 4). There is insufficient antecedent basis for this limitation in the claim because the term Δ/d is not defined in the claim.

7. **Claim 20** recites the limitation "said relative cell gap variation" (line 2). There is insufficient antecedent basis for this limitation in the claim.

8. **Claim 25** is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only, i.e. the claim refers to independent claims 24 and to claim 1. See MPEP § 608.01(n).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claims 2, 7, 9, 11, 14 and 20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since

the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c).

12. In the present instance, claims 2 and 11 recite the broad recitation "smaller than or equal to... 1.3 GPa," and the claim also recites "smaller than or equal to... 1.1 GPa, 1 GPa, 0.9 GPa, 0.8 GPa, 0.7 GPa, 0.6 GPa, 0.5 GPa, 0.4 GPa, 0.3 GPa, 0.2 GPa [or] 0.1 GPa," which are narrower statements of the range/limitation.

13. Claims 7 and 14 recite the broad recitation "larger than 2," and the claim also recites "larger than... 2.5, 3, 5, 8, 10, 15 or 20," which are narrower statements of the range/limitation.

14. Claim 9 recites the broad recitation "smaller than... 300 [mm]," and the claim also recites "smaller than... 200, 100, 50, 40, 30, 20, 15, 10, 5, 3 [or] 1 mm," which are narrower statements of the range/limitation.

15. Claim 20 recites the broad recitation "equal to or smaller than... 5%," and the claim also recites "equal to or smaller than... 4%, 3%, 2.5%, 2%, 1.5%, 1%, 0.5%, 0.25% and 0.1%," which are narrower statements of the range/limitation.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. **Claims 1-5, 7, 8, 22 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Hinata, US PGPub. No. 2001/0020985 A1.

18. Regarding claims 1-3 and 24, Hinata discloses a flexible flat panel (i.e. liquid crystal) display comprising a transparent first substrate (i.e. transparent elastic member) characterized in that said first substrate has a modulus of elasticity of between $1x10^4$ and $1x10^8$ N/m^2, or between 1×10^{-6} and 0.1 GPa, and preferably $7x10^{-6}$ N/m^2 ($7x10^{-3}$ GPa) (¶ [0026]), thereby anticipating the claimed ranges of from 1.5 to 0.1 GPa or less.

19. Regarding claim 4, Hinata further discloses one or more layers (5, 8a, 16a) positioned substantially coplanar and adjacent to upper and/or lower surface of said first substrate (4) (Figs. 5 and 7).

20. Regarding claim 5 and 7, Hinata further discloses a first layer (5) positioned substantially coplanar and adjacent to said first substrate (4) (Fig. 5), in which first layer has a modulus of elasticity, E_I, and said first substrate has a modulus of elasticity, E_{II}, where E_I is larger than E_{II}. Specifically, Hinata discloses the first layer (5) to preferably have a Young's modulus larger than that of the transparent elastic member (4) (¶ [0072]).

21. Hinata discloses in another embodiment a first layer (8a) positioned substantially coplanar and adjacent to said first substrate (4) (Fig. 7), in which first layer has a

modulus of elasticity, E_I, and said first substrate has a modulus of elasticity, E_{II}, where E_I is larger than E_{II}. Specifically, Hinata discloses the first layer (8a) to be a plastic film consisting of, for example, polycarbonate, polyacrylate, or polyether sulfone (¶ [0070]). Said first layer as disclosed would thereby have a modulus of elasticity, E_I, of from 2 to 2.5 GPa, which would be larger than the modulus of elasticity, E_{II}, of the first substrate (i.e. 7×10^{-3} GPa) (¶ [0026]).

22. Regarding claim 6, claim 5 is anticipated by Hinata above. Hinata also discloses said first layer (8a) to be positioned nearest to the electro-optical medium (i.e. liquid crystal layer (L)) and said first substrate (4) to be furthest from the electro-optical medium (Fig. 7).

23. Regarding claim 7, claim 5 is anticipated by Hinata above. Since Hinata discloses the first layer to be a plastic film having a modulus of elasticity of from 2 to 2.5 GPa, as discussed under claim 5 above, and the first substrate to have a modulus of elasticity of 7×10^{-3} GPa (¶ [0026]), Hinata thereby discloses the ratio of E_I/E_{II} to be larger than 20, anticipating the claimed ranges.

24. Regarding claim 8, claim 5 is anticipated by Hinata above. Hinata also discloses the first layer (i.e. protective acrylic plate) to have a thickness of 1mm, and the first substrate (i.e. transparent elastic member) to have a thickness of from 0.5 to less than 2 mm (¶ [0066]), thereby disclosing the first layer to have a thickness of from over 50% to

66% of the total thickness of said first substrate and first layer, and anticipating the claimed range of up to 80%.

25. Regarding claim 22, claim 1 is anticipated by Hinata above. Hinata additionally discloses the first substrate to be transparent and made of silicon rubber, a flexible polymer (Hinata, ¶ [0022]).

Claim Rejections - 35 USC § 103

26. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

28. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hinata in view of Wakita et al. (Wakita), US Pat. No. 5,307,190.

29. Hinata discloses a flexible flat panel display, as discussed under claim 1 above.

30. Hinata fails to disclose or teach the first substrate of said flat panel display to be bendable into a radius of curvature smaller than 300, 200, 100, 50, 40, 30, 20, 15, 10, 5, or 3 mm.

31. However, Wakita discloses a flexible flat liquid crystal display comprising a flexible thin film substrate, said substrate being bendable into radius of curvature of approximately 10 mm (Wakita, col. 11, lines 43-46), which is smaller than, for example, 300 mm.

32. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a substrate bendable into radius of curvature of smaller than 300 mm, as taught by Wakita, in the flexible flat panel display of Hinata, in order to provide a panel which is free from disorder of orientation even if the panel is subjected to mechanical shock or pressure (Wakita, col. 3, lines 42-45).

33. **Claims 10-17, 20, 21 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinata, in view of Hinata et al., US Pat. No. 6,812,974 B1 ("Pat. '974").

34. Regarding claims 10, 11 and 23, Hinata discloses a flexible flat panel display comprising a transparent first substrate having a modulus of elasticity of less than 0.1 GPa, as discussed under claim 1 above. Hinata discloses said transparent first substrate to be natural rubber with a Young's modulus of $9x10^6$ N/m^2 ($7x10^{-3}$ GPa), or silicone rubber with a Young's modulus of $7x10^6$ N/m^2 ($7x10^{-3}$ GPa) (¶ [0026]).

35. Hinata fails to expressly disclose a display substrate having a modulus of elasticity of less than 0.1 GPa.

36. However, Pat. '974 discloses a liquid crystal display device comprising a supporting member (i.e. display substrate) (37) of synthetic rubber (Pat. '974, Fig. 5; col. 12, lines 28-47). The synthetic rubber substrate as disclosed in Pat '974 is functionally equivalent to the silicone rubber substrate as disclosed by Hinata, and would therefore be transparent and have a modulus of elasticity of less than 0.1 GPa, i.e. $7x10^6$ N/m^2 or $7x10^{-3}$ GPa.

37. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a transparent display substrate having a modulus of elasticity of less than 0.1 GPa, as taught by Pat. '974, as a substrate in the flexible flat panel display device of Hinata, in order to prevent the formation of a distortion pattern in the liquid crystal device (Pat. '974, Abstract).

38. Regarding claim 12, claim 10 is unpatentable over the combination of Hinata and Pat. '974 as discussed above. Hinata further discloses one or more layers positioned

substantially coplanar and adjacent to the first substrate, as discussed under claim 4 above.

39. Hinata fails to expressly disclose one or more layers positioned substantially coplanar and adjacent to the display substrate.

40. However, Pat. '974 discloses one layer (22b) positioned substantially coplanar and adjacent to the display substrate (37) (Pat. '974, Fig. 5).

41. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include one or more layers positioned substantially coplanar and adjacent to the display substrate, as taught by Pat. '974, in the flexible flat panel display device of Hinata, in order to prevent the formation of a distortion pattern in the liquid crystal device (Pat. '974, Abstract).

42. Regarding claim 13, claim 10 is unpatentable over the combination of Hinata and Pat. '974 as discussed above. Hinata further discloses a first layer positioned substantially coplanar and adjacent to a first substrate, wherein the first layer has a modulus of elasticity, E_I, and the first substrate has a modulus of elasticity, E_{II}, where E_I is larger than E_{II}, as discussed under claim 5 above.

43. Hinata fails to expressly disclose a second layer positioned substantially coplanar and adjacent to the display substrate, wherein said second layer has modulus of elasticity, E_{III}, and said display substrate has a modulus of elasticity, E_{IV}, where said E_{III} is larger than E_{IV}.

44. However, Pat. '974 discloses a second layer (22b) positioned substantially coplanar and adjacent to the display substrate (37), wherein the second layer has a modulus of elasticity larger than that of said display substrate. Specifically, Pat. '974 discloses that it is preferable for the supporting member (i.e. display substrate) (37) to be more flexible than the second substrate (i.e. second layer) (22b), thereby having a modulus of elasticity smaller than that of the supporting member (i.e. display substrate) (Pat. '974, col. 12, lines 43-55).

45. Pat. '974 also discloses the second layer to be a plastic film consisting of, for example, polycarbonate, polyacrylate, or polyether sulfone (Pat. '974, col. 6, lines 38-41). Said second layer as disclosed would thereby have a modulus of elasticity, E_{III}, of from 2 to 2.5 GPa, which would be larger than the modulus of elasticity, E_{IV}, of the display substrate as discussed under claim 10 above.

46. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a second layer positioned substantially coplanar and adjacent to the display substrate, wherein the second layer has a modulus of elasticity larger than that of said display substrate, as taught by Pat. '974, in the flexible flat panel display device of Hinata, in order to prevent the formation of a distortion pattern in the liquid crystal device (Pat. '974, Abstract).

47. Regarding claim 14, claim 13 is unpatentable over the combination of Hinata and Pat. '974 as discussed above. Hinata further discloses the ratio of E_I/E_{II} to be larger than 20, as discussed under claim 7 above.

48. Hinata fails to expressly disclose the ratio E_{III}/E_{IV} to be larger than a number chosen among the group of numbers 2, 2.5, 3, 5,8, 10, 15 or 20.

49. However, Pat. '974 discloses the second layer to be a plastic film having a modulus of elasticity of from 2 to 2.5 GPa, as discussed under claim 13 above, and the display substrate to have a modulus of elasticity of $7x10^{-3}$ GPa, as discussed under claim 10 above. Pat. '974 thereby discloses the ratio of E_{III}/E_{IV} to be larger than 20, overlapping the claimed ranges.

50. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the ratio E_{III}/E_{IV} to be larger than, for example, 20, as taught by Pat. '974, in the flexible flat panel display device of Hinata, in order to prevent the formation of a distortion pattern in the liquid crystal device (Pat. '974, Abstract).

51. Regarding claim 15, claim 13 is unpatentable over the combination of Hinata and Pat. '974 as discussed above. Hinata also discloses the first layer to have a thickness of up to 80% of the total thickness of the first substrate and the first layer, as discussed under claim 8 above.

52. Hinata fails to disclose the second layer to have a thickness of up to 80% of the total thickness of the display substrate and the second layer.

53. Pat '974 discloses a display substrate and second layer as discussed under claim 13 above, but is silent as to the thickness of the second layer.

54. However, it would have been an obvious matter of choice to give the second layer a thickness of up to 80% of the total thickness of the display substrate and second layer, in the liquid crystal display device as taught by the combination of Hinata and Pat. '974, since such a modification would have involved a mere change in the size of the second layer. A change of size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

55. Regarding claim 16, claim 10 is unpatentable over the combination of Hinata and Pat. '974 as discussed above.

56. Hinata further discloses a first spacer and a second spacer (7) positioned between first substrate and said display substrate, as well as a cell structure for containing an electro-optical medium and defined between said first substrate, said display substrate, said first spacer and said second spacer, said cell structure defining a cell gap between said first substrate and display substrate (Hinata, Fig. 7; ¶ [0023]). Specifically, the cell structure as disclosed by Hinata is defined by the spacers (7) and (6).

57. Regarding claim 17, claim 16 is unpatentable over the combination of Hinata and Pat. '974 as discussed above. Hinata further also discloses the first layer to be positioned nearest to the electro-optical medium and the first substrate to be furthest from the electro-optical medium, as discussed under claim 6 above.

58. Hinata fails to expressly disclose the second layer to be positioned nearest the electro-optical medium and the display substrate to be positioned furthest from the electro-optical medium.

59. However, Pat '974 discloses the second layer (22b) to be positioned nearest the electro-optical medium (32) and the display substrate (37) to be positioned furthest from the electro-optical medium.

60. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the second layer positioned nearest the electro-optical medium and the display substrate positioned furthest from the electro-optical medium, as taught by Pat. '974, in the flexible flat panel display device of Hinata, in order to prevent the formation of a distortion pattern in the liquid crystal device (Pat. '974, Abstract).

61. Regarding claim 20, claim 16 is unpatentable over the combination of Hinata and Pat. '974 as discussed above. Hinata fails to expressly disclose the relative cell gap variation to be equal to or smaller than, for example, 5%.

62. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to ensure a relative cell gap variation equal to or smaller than 5%, in a liquid crystal display as taught by the combination of Hinata, and Pat. '974, since it is well known in the art to minimize any variation in the cell gap, and it has been held that where the general conditions of a claim are disclosed in the prior art,

discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller,* 105 USPQ 233.

63. Regarding claim 21, claim 10 is unpatentable over the combination of Hinata and Pat. '974 as discussed above. Hinata further discloses a plurality of first and second spacers (6) positioned between first and second substrates defining a plurality of cell structures there between.

64. Regarding claim 23, claim 10 is unpatentable over the combination of Hinata and Pat. '974 as discussed above. Hinata further discloses the first substrate to be transparent and comprise a flexible polymer, as discussed under claim 22 above.

65. Hinata fails to expressly disclose the display substrate to comprise a flexible polymer being transparent or opaque.

66. However, Pat. '974 discloses a liquid crystal display device comprising a supporting member (i.e. display substrate) (37) of synthetic rubber (Pat. '974, Fig. 5; col. 12, lines 28-47). The synthetic rubber substrate as disclosed in Pat '974 is functionally equivalent to the silicone rubber substrate as disclosed by Hinata, and would therefore be transparent and comprise a flexible polymer.

67. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a display substrate comprising a flexible polymer being transparent or opaque, as taught by Pat. '974, as a substrate in the

flexible flat panel display device of Hinata, in order to prevent the formation of a distortion pattern in the liquid crystal device (Pat. '974, Abstract).

68. **Claims 18 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinata in view of Pat. '974, as applied to claim 16 above, and further in view of Wakita.

69. Regarding claim 18, claim 16 is unpatentable over the combination of Hinata and Pat. '974 as discussed above.

70. Hinata fails to expressly disclose the flexible flat panel display to be adapted to bend in a curvature while ensuring a relative cell gap variation to be equal to or smaller than 5%.

71. Wakita discloses a flexible flat panel display adapted to bend in a curvature, as discussed under claim 9 above. Wakita is silent as to the amount of relative cell gap variation.

72. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to ensure a relative cell gap variation equal to or smaller than 5%, in a liquid crystal display as taught by the combination of Hinata, Pat. '974, and Wakita, since it is well known in the art to minimize any variation in the cell gap, and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller,* 105 USPQ 233.

73. Regarding claim 19, claim 16 is unpatentable over the combination of Hinata and Pat. '974 as discussed above.

74. Hinata fails to expressly disclose the relative cell gap variation, and fails to expressly disclose a radius of curvature for the flexible flat panel display.

75. Wakita discloses a flexible flat panel display bendable into radius of curvature, R, of approximately 10 mm, as discussed under claim 9 above. Wakita is silent as to the amount of relative cell gap variation.

76. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to ensure a relative cell gap variation equal to or smaller than 5%, in a liquid crystal display as taught by the combination of Hinata, Pat. '974, and Wakita, since it is well known in the art to minimize any variation in the cell gap, and it has been held that discovering an optimum value of a result effective variable (such as d, h, or L) involves only routine skill in the art. *In re Aller,* 105 USPQ 233.

Cited Prior Art

77. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. For example:

a. The following art discloses a flat panel display device comprising a flexible substrate:

i. US Pat. No. 6,750,844 B2 discloses a flexible electrophoretic display.

ii. US PGPub. No. 2003/0043317 A1 to a common inventor and assignee discloses a flat panel display device comprising a flexible substrate bendable to a radius of curvature of 100cm or less.

b. The following art discloses flexible flat panel displays:

iii. US Pat. No. 4,804,254 A discloses a flexible flat panel display comprising a plastic film.

iv. US PGPub. No. 2002/0180344 A1 discloses a flexible flat panel display coupled to a power source.

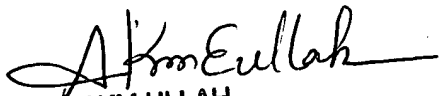
v. JP H02-282225 A (Abstract) discloses an exemplary flexible flat panel display comprising multiple layers and spacer elements.

Conclusion

78. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew P. Lawson whose telephone number is 571-272-9795. The examiner can normally be reached on Monday through Thursday from 8:00am to 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm E. Ullah, can be reached on 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AKM ULLAH
SUPERVISORY PATENT EXAMINER

Matthew P. Lawson,
Assistant Examiner

MPL